**1**

-num\_features = train\_scaled\_x.shape[1]

model = Sequential()

model.add(Dense({{choice([32, 64, 128])}}, input\_dim=num\_features, activation='relu'))

model.add(Dropout({{uniform(0, 1)}}))

model.add(Dense({{choice([32, 64, 128])}}, activation = 'relu'))

model.add(Dropout({{uniform(0, 1)}}))

model.add(Dense({{choice([32, 64, 128])}}, activation = 'relu'))

model.add(Dense(1, activation = 'relu'))

model.compile(optimizer='adam', loss='mean\_squared\_error', metrics=['mse', 'mae', 'mape', 'cosine'])

history = model.fit(train\_scaled\_x, train\_y,

batch\_size={{choice([128, 256, 512])}},

epochs={{choice([5, 10, 20])}},

verbose=2,

validation\_split=0.2)

-max\_evals=40

-{'Dense': 2,

'Dense\_1': 0,

'Dense\_2': 0,

'Dropout': 0.41439549189658886,

'Dropout\_1': 0.044907939895175525,

'batch\_size': 1,

'epochs': 2}

-# Root Mean Squared Logarithmic Error

0.37337292640887904

**2**

**3**